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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,819	07/21/2003	Klaus Hohn	12406-007002	5729

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FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,819

Applicant(s)

HOHN ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/082,205.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/10/03, 2/19/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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The information disclosure statement filed 10 November 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the publication date is missing from references AB-AX and EF-EI and the complete title of reference DS were not provided. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

The information disclosure statement filed 10 November 2003 cites JP 07-176,794 twice. Accordingly, one of the two citations has a line drawn through it.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The earlier filed parent applications only teach an transparent epoxy casting resin and only teach the phosphors of claims 1 and 24. There is no indication in the earlier filed

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applications that the casting resin in the disclosed casting composition can be any transparent resin and that the phosphor can be any phosphor besides those explicitly disclosed.

Accordingly, the effective filing date of claims 1-4, 6-27 and 29-41 is 21 July 2003.

This application repeats a substantial portion of prior Application Nos. 09/654368, filed 1 September 2000, adds and claims additional disclosure not presented in the prior application. Since this application names an inventor or inventors named in the prior application, it constitutes a continuation-in-part of the prior application.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claimed teaching that the resin in the coating composition is a transparent casting resin in general and that the inorganic luminous substance pigment powder can have any composition as long as it converts UV, blue or green light. The specification only teaches a transparent epoxy casting resin and the phosphors on pages 11 and 12.

The disclosure is objected to because of the following informalities: The status of applications 09/654,368 and 09/536564 needs to be updated. Appropriate correction is required.

Claims 5, 11, 20 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 28 are indefinite since it is unclear if the epoxy casting resin in these claims is the resin in claims 1 and 24. Claims 11 and 20 are indefinite since the chromium activated garnets in the claims are excluded by claims 1 and 13 from which they depend.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 40 and 41 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. patent 6,803,719.

This reference teaches a light emitting device comprising a light source and quantum dots in a host matrix. The host matrix is a transparent casting resin (col. 3, lines 40-50). Quantum dots are nanosized inorganic luminous substances, which means the particles have a grain size less than 20 microns and an average particle size less than 5 microns. The light source is a LED, which is a semiconductor body formed of a semiconductor layer sequence that emits light. The embodiment in column 7 teaches a blue emitting LED and a wavelength converting compositions comprising the quantum dots in a transparent castable resin, where the quantum converts part of the blue light to red light. The examples teach similar embodiments. The compositions and devices in the examples and in column 7 clearly teach upon the claimed composition and device.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-4, 6-27 and 29-41 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,066,861 in view of U.S. patent 5,998,925.

U.S. patent 6,066,861 teaches a wavelength-converting casting composition comprising a transparent casting resin and the claimed inorganic luminous substances of claims 1-4, 6-11, 24-27 and 29-32. The composition can also contain light scattering particles. U.S. patent 6,066,861 also teach a device having the same structure as the claimed device and comprising a wavelength-converting casting composition comprising a transparent casting resin and the claimed inorganic luminous substances of claims 13-23 and 33-39. There is no teaching in U.S. patent 6,066,861 that the casting resin can be any other resin besides an epoxy. U.S. patent 5,998,925 teaches similar devices where a wavelength converting composition is disposed near an LED to convert the wavelength emitted by the LED. Column 16, lines 53-59 teach the resin in the wavelength converting composition is selected from epoxies, urea resin and silicones. This teaching suggests that these three resins are all functionally equivalent. Therefore one of ordinary skill in the art would have found it obvious to replace the taught epoxy in U.S. patent 6,066,861 with a functionally equivalent urea or silicone resin. The references suggest the claimed compositions and devices.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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Claim 28 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 5 of prior U.S. Patent No. 6,245,259. This is a double patenting rejection.

The combination of claims 24 and 28 is the same invention as claims 1 and 5 of the patent since independent claims define the phosphors and the dependent claims defines the resin.

Claim 5 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 5 of prior U.S. Patent No. 6,613,247. This is a double patenting rejection.

The combination of claims 1 and 5 is the same invention as claims 1 and 5 of the patent since independent claims define the phosphors and the dependent claims define the resin.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, 6-8, 11, 12, 24, 27, 29-31 and 40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 24-32 and 37-42 of copending Application No. 09/731,406. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method claimed in the copending application produces a wavelength casing composition comprising a transparent casting resin and rare earth and chromium doped garnets, Ce-doped phosphors, rare

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earth doped thiogallate, rare earth doped aluminates and rare earth doped orthosilicates where the phosphors have a grain size ≤ 20 microns and a mean grain diameter $d_{50} \leq 5$ microns, preferably 1-2 microns, and iron content ≤ 20 ppm and which can further contain light scattering particles. This composition falls within the scope of the claimed composition claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-4, 6-15, 20-22, 27, 29-35, 40 and 41 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17-36 of copending Application No. 10/616,783. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed device and wavelength converting casting composition in the copending application falls within the scope of the device and wavelength converting casting composition claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-11, 13-17, 20, 21, 24-37, 40 and 41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,066,861. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed device and wavelength converting casting composition in the copending application falls within the scope of the device and wavelength converting casting composition claimed in this application.

Claims 1-11, 13-21 and 24-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No.

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6,245,259. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed device and wavelength converting casting composition in the copending application falls within the scope of the device and wavelength converting casting composition claimed in this application.

Claims 1-4, 6-8, 10-12, 24-27 and 29-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 11-14, 16 and 18 of U.S. Patent No. 6,277,301. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method claimed in patent produces a wavelength casing composition falls within the scope of the device and wavelength converting casting composition claimed in this application.

Claims 24, 27 and 32-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,592,780. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed device and wavelength converting casting composition in the copending application falls within the scope of the device and wavelength converting casting composition claimed in this application.

Claims 1-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,613,247. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed device and wavelength converting casting composition in the copending application falls within the scope of the device and wavelength converting casting composition claimed in this application.

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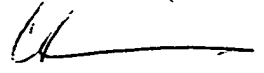
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
December 16, 2004



C. Melissa Koslow
Primary Examiner
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